ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Keithley DAS-802* at our website: ***Click HERE***

DAS-800

40kHz, 12-Bit Multifunction Boards

- **8 analog input channels, externally expandable to 128 inputs**
- **Switch-selectable single-ended/ differential inputs per channel on the DAS-801**
- **Up to 40 kSamples/s sampling rate**
- **4-location FIFO**
- **3 digital inputs, 4 digital outputs**
- **External hardware trigger and gate**
- **100% register and connector compatible with the DAS-8 Series**
- **32-bit DriverLINX® drivers plus a suite of bundled software including ExceLINX™, VisualSCOPE™, TestPoint™, and LabVIEW™ drivers**

Ordering Information

DAS-800 40 kSample/s Analog and Digital I/O Board

DAS-801 40 kSample/s Analog and Digital I/O Board with gains of 0.5, 1, 10, 100, 500



The DAS-800 Series consists of two analog and digital I/O boards: the DAS-800 and the DAS-801. You'll find flexibility and many advanced features in the analog input section of this series. The DAS-800 features eight analog inputs with a fixed input range of ±5V. The DAS-801 also has eight analog inputs, which can be individually switch-selected for single-ended or differential operation. The DAS-800 Series boards are low impact, upscale paths for boards in the DAS-8 Series.

up & running software

DAS-800 SERIES SELECTOR GUIDE

	DAS-800	DAS-801
Analog Inputs	8 single-ended	8 switch-selectable for single-ended or differential
Maximum Speed	40 kS/s	40 kS/s
Resolution	12 bits	12 bits
FIFO	4 locations	4 locations
Input Ranges Unipolar	–	0–10V, 0–1V, 0–100mV, 0–20mV
Bipolar	±5V	±10V, ±5V, ±500mV, ±50mV, ±10mV
Digital Inputs	3	3
Digital Outputs	4	4
Compatible DAS-8 Board	DAS-8	DAS-8PGA

ACCESSORIES AVAILABLE

C1800	DAS-800 Series to STA or STP-37 Cable
EXP-16	16-Channel Multiplexer Accessory Board
STC-37	Screw Terminal Connector
STA-08	Screw Terminal Accessory Board for the DAS-800
STA-08PGA	Screw Terminal Accessory Board for the DAS-801
STA-MB	Screw Terminal Accessory for the MB-Series Modules
STP-37	Screw Terminal Panel

Great selection of analog and digital I/O boards

DATA ACQUISITION PRODUCTS

1.888.KEITHLEY (U.S. only)

www.keithley.com

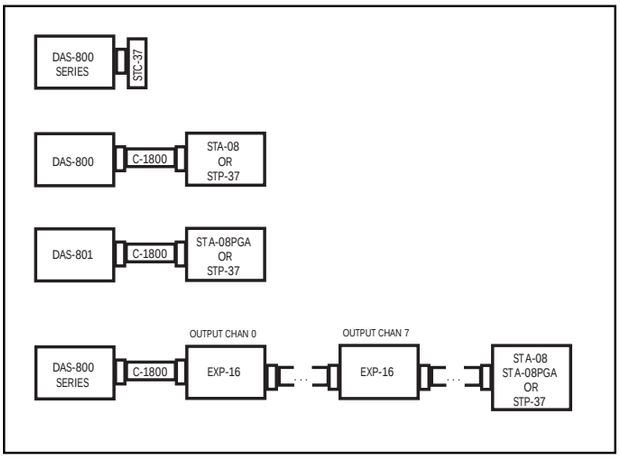
KEITHLEY

A GREATER MEASURE OF CONFIDENCE

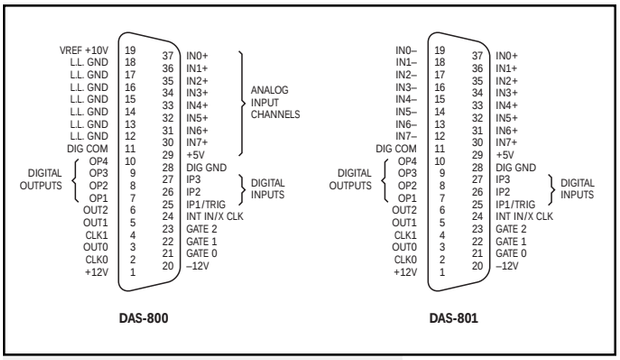
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DAS-800 40kHz, 12-Bit Multifunction Boards

Configuration Guide



Connector Pin Assignments



Specifications

ANALOG INPUTS

CHANNELS: 8.

CHANNEL CONFIGURATION: DAS-800: Single ended. DAS-801 (per channel): Switch selectable single ended or differential.

INPUT RANGES:
DAS-800: ±5V.
DAS-801: ±10V, ±5V, ±500mV, ±50mV, ±10mV. 0–10V, 0–1V, 0–100mV, 0–20mV.

INPUT RANGE SELECTION:
DAS-800: Fixed.
DAS-801: Software programmable.

INPUT CHANNEL SELECTION: Software selectable or automatic scanning.

MAXIMUM OVERVOLTAGE: ±35V, single channel.

INPUT IMPEDANCE: >1GΩ typical.

INPUT CURRENT: ±30nA @ 25°C. ±250nA over temperature.
A/D CONVERTER TYPE: Successive approximation with internal sample and hold.

RESOLUTION: 12-bits.

LINEARITY: ±1 bit.

CONVERSION TIME: 25µs max.

ACCURACY - DAS-800: ±0.01% of full scale ±1 bit, max.

ACCURACY - DAS-801: ±0.01% of full scale ±1 bit, typical. ±0.05% of full scale ±1 bit, max.

THROUGHPUT UNDER DOS: 40kS/s at gain ≤ 100. 25kS/s at gain = 500.

TEMPERATURE COEFFICIENTS:
GAIN - DAS-800: ±45ppm/°C max.
GAIN - DAS-801: ±50ppm/°C max.
ZERO - DAS-800: 100µV/°C max.
ZERO - DAS-801: (±2µV ± 100µV/gain)/°C max.

CLOCKING: Software, internal timebase, external clock.

TRIGGERING: Software, external hardware digital trigger.

GATING: External hardware digital gate.

DATA TRANSFER METHOD: I/O Read.

FIFO LENGTH: 4-words.

COMMON MODE REJECTION: @ 60Hz: (DAS-801):	Gain = 1	70dB min
	Gain = 10	90dB min
	Gain ≥ 100	100dB min

DIGITAL I/O

INPUT BITS: 3.

INPUT LOW VOLTAGE: 0.08V max.

INPUT HIGH VOLTAGE: 2.0V min.

INPUT LOW CURRENT: –0.4mA max.

INPUT HIGH CURRENT: 20µA max @ 2.7V.

OUTPUT BITS: 4.

OUTPUT LOW VOLTAGE: 0.5V max @ 8.0mA.

OUTPUT HIGH VOLTAGE: 2.7V min @ –0.4mA.

ENVIRONMENTAL

OPERATING TEMPERATURE: 0°C to 50°C.

STORAGE TEMPERATURE: –20°C to +70°C.

HUMIDITY: 0 to 90% (non-condensing).

EMC: Conforms to European Union Directive 89/336/EEC.

SAFETY: Meets EN61010-1/IEC 1010.

DIMENSIONS:
DAS-800: 5.0in × 4.25in × .75in (12.7cm × 10.8cm × 1.9cm).
DAS-801: 6.0in × 4.25in × .75in (15.2 cm × 10.8cm × 1.9cm).

1.888.KEITHLEY (U.S. only)
www.keithley.com

KEITHLEY
A GREATER MEASURE OF CONFIDENCE

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP